

STS-112 LAUNCH DAY VIDEO REVIEW
KSC Photo/Video Analysis Team
7 October 2002

Significant Anomalies

None

Minor Anomalies

None.

Funnies

None.

Observations

- ET CAMERA** - Free burning hydrogen blown south during SSME start-up.
- At approx T-3 seconds 2 particles seen to the +Y side of the cable tray. Probably ice from the forward LO2 feedline bellows. No contact with vehicle observed.
 - Small particles enter field of view from upper right and pass to lower left between approx. T+3 and T+4 seconds. No contact with vehicle observed.
 - Forward RCS butcher paper fell during roll maneuver.
 - Localized flow condensation visible on various points on the vehicle.
 - Erosion of forward portion of cable tray PAL ramp was visible.
 - Instafoam from RH SRB aft skirt ejected out of plume at approx. T+72 seconds. This compares to observation in TV-4.
 - Evidence of forward RCS thruster firing was visible at approx. T+120 seconds.
 - View degrades at approx. T+121 seconds (SRB sep).
 - OMS-assist firing was visible shortly after SRB separation (approx. T+132 seconds).

Numerous pieces of ice from the ET/ORB umbilical shook loose, but no damage was detected. (OTV 109, 154, 163).

Free burning hydrogen blown past the vertical stabilizer. (OTV 170, 171, TV-4, TV-7B).

LH2 and LO2 T-0 umbilical disconnect was normal. (OTV 149, 150).

Frost was visible around -Y ET GOX vent louver. (OTV 161).

Several pieces of aft skirt instafoam ejected out of the SRB plume during ascent (TV 4).

Localized flow condensation at various points on the vehicle (TV 4, TV 13).

GH2 vent line retraction and latch appeared nominal (OTV 160).

ET aft dome charring was visible. (TV 13)

Notes

A total of 19 videos were made available for review.

Review of long range tracking films is scheduled to begin Tuesday, October 8, 2002.

Armando Oliu
NASA-KSC

Robert Speece
NASA_KSC